RFA Electronics

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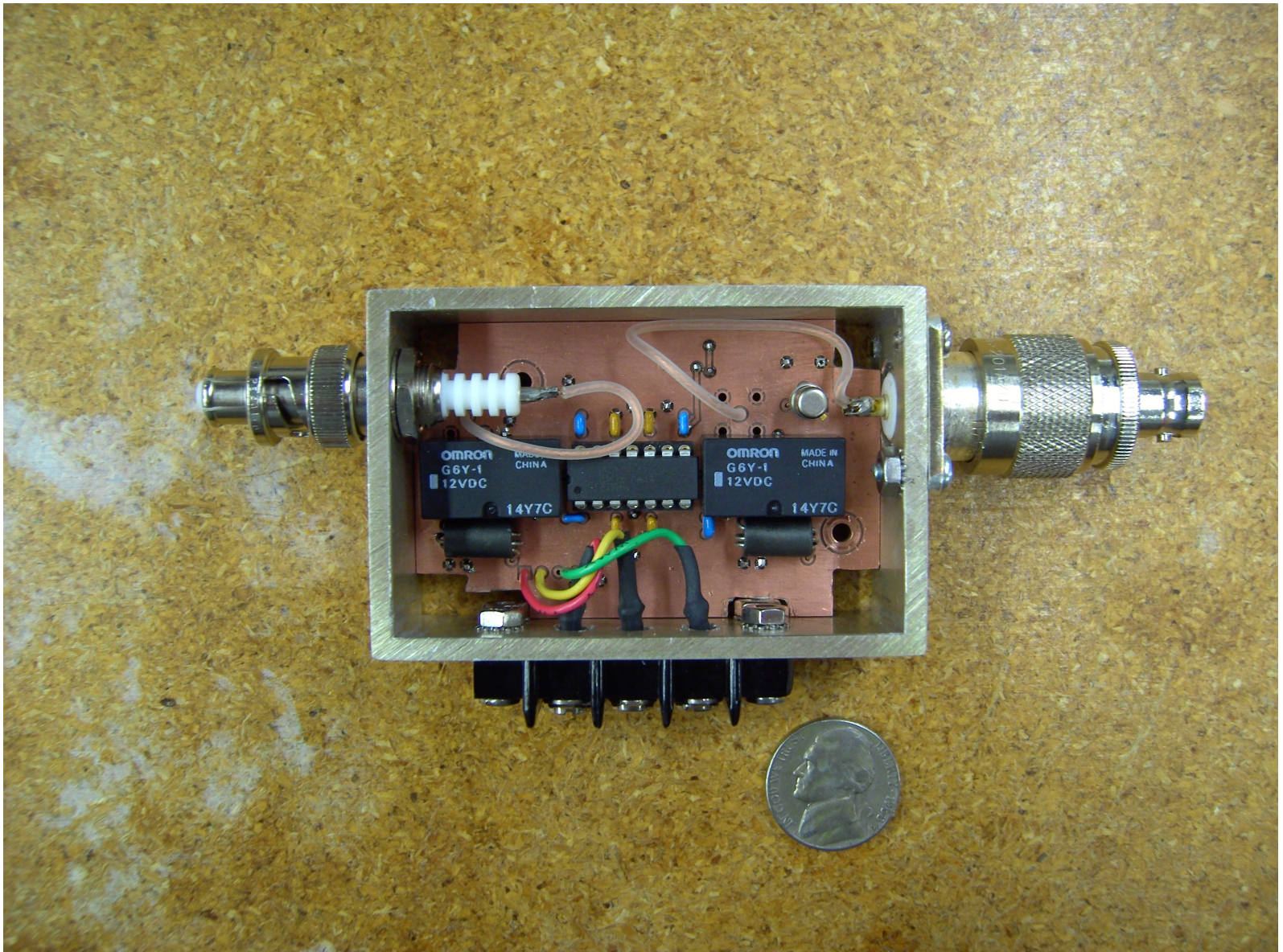
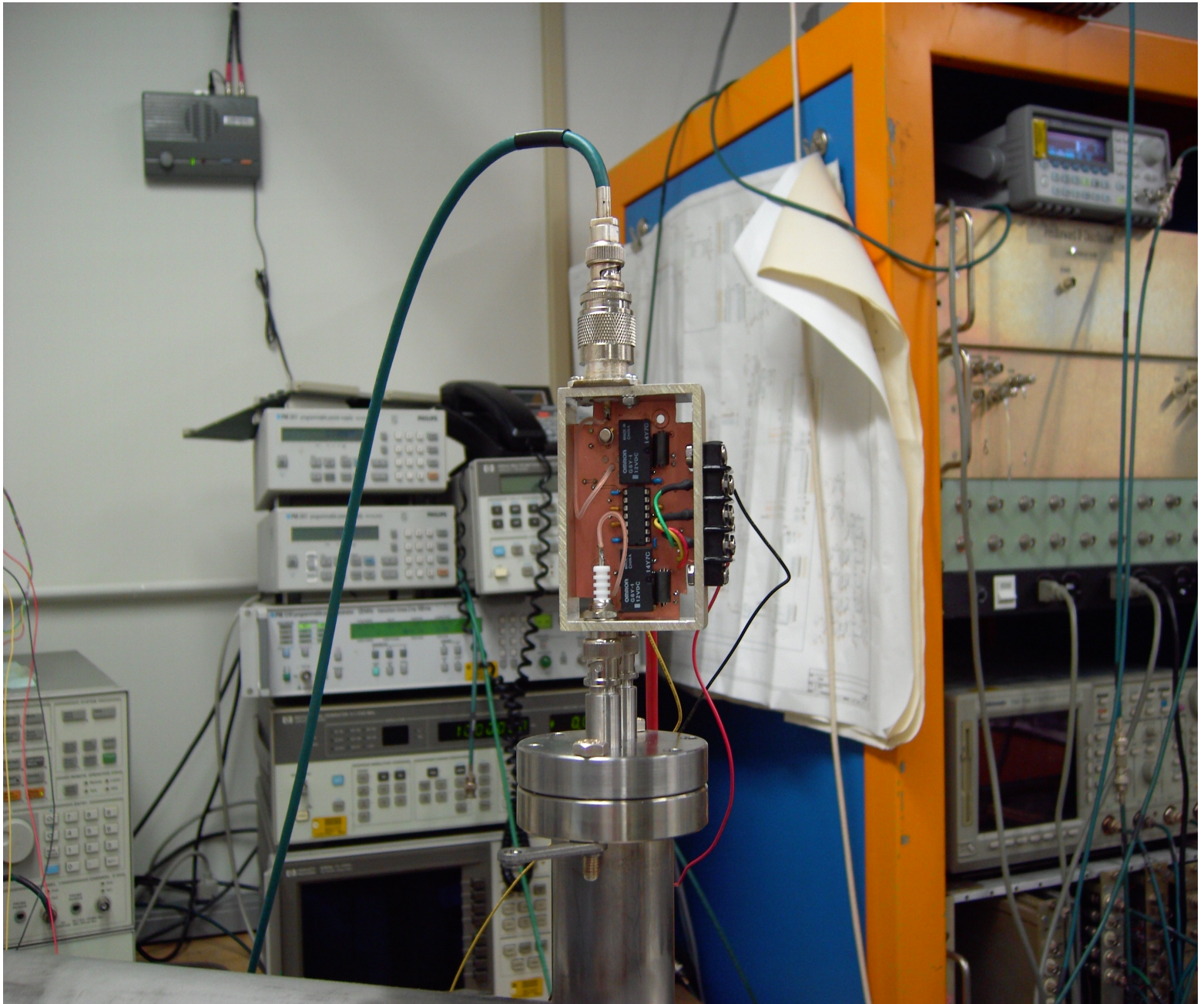
25 Feb 2009

The RFA Filter



Note: The actual rad hard opamp is not in right now. Ken needs to make a adapter board because the radhard op amp a non standard DIP.

Electronics attached to RFA



This is how it will be attached to the RFA.

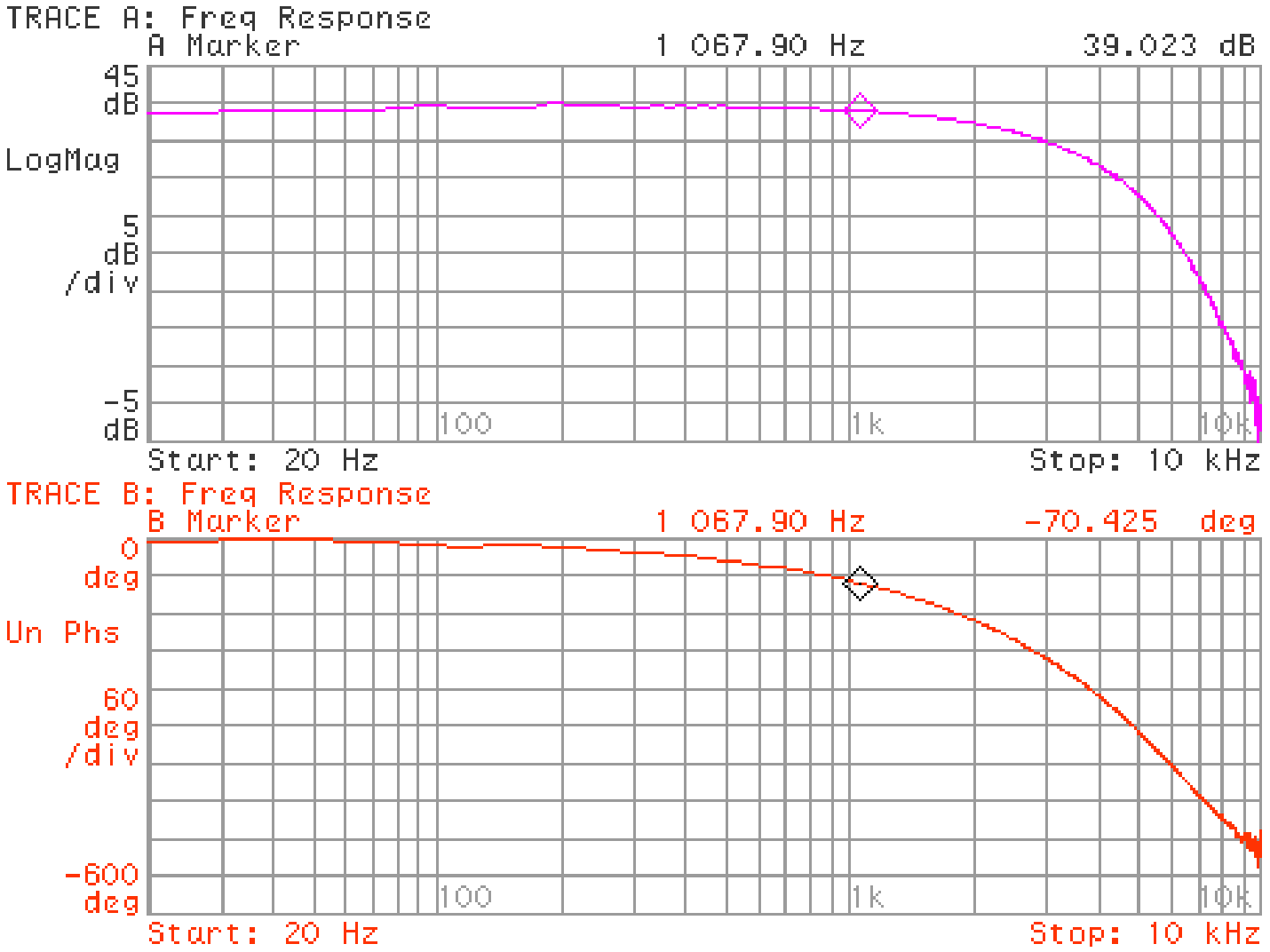
Note: connector strip will be replaced with Twinex.

Some Preliminary Measurements

- Note: Measurements done with OP470A which has the same electronic characteristics as the radhard opamp HS5104-ARH.

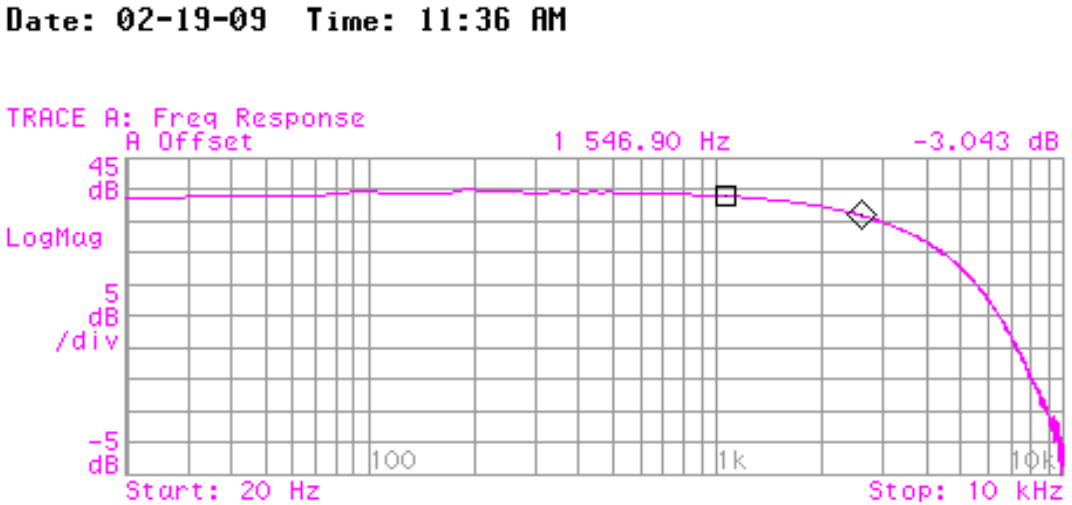
Filter Response

Date: 02-19-09 Time: 11:36 AM

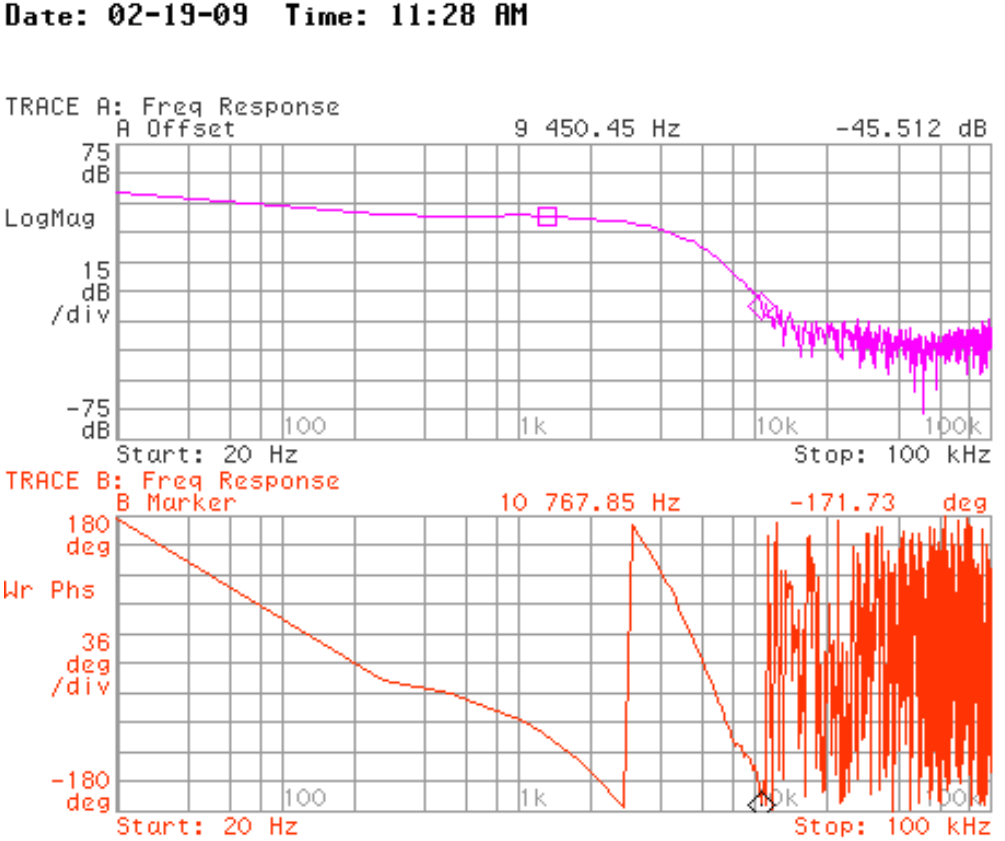


39 dB of power gain

Filter Response (cont'd)

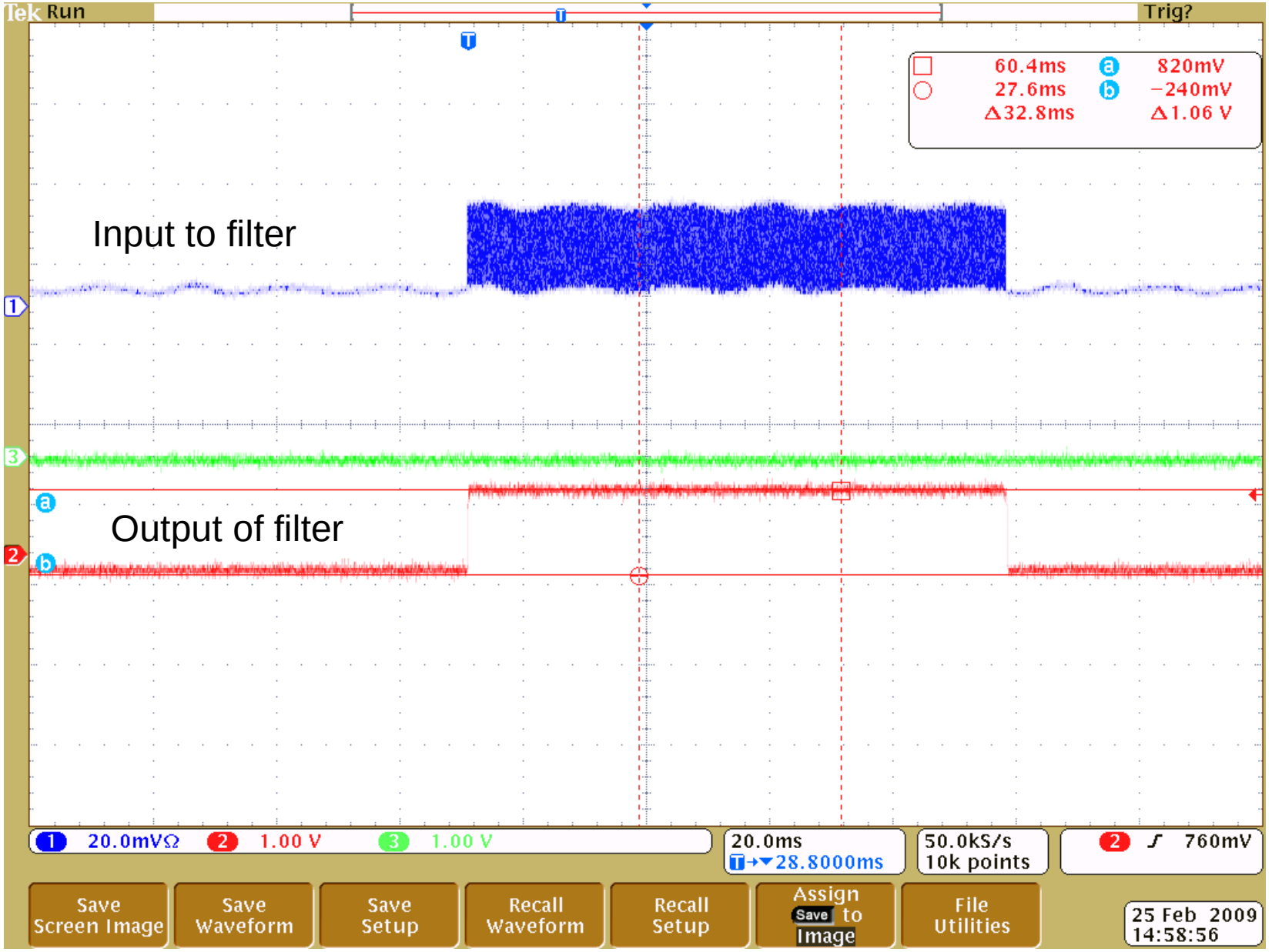


3dB point at 2.6 kHz. Design was for 3kHz. Good match!



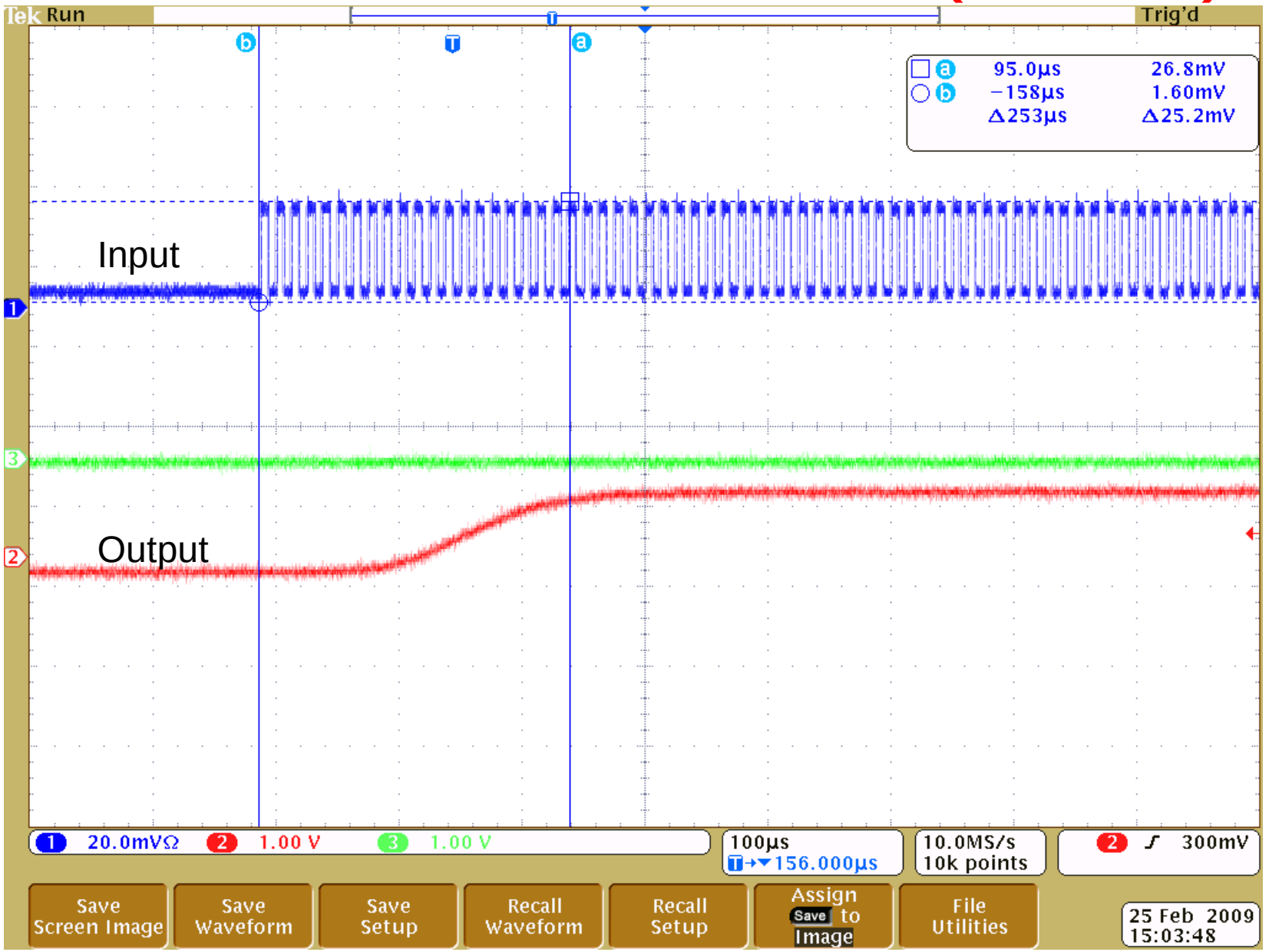
Better than 45dB of attenuation above 10kHz.

Time Domain



Pulse train of 7000 pulses. 12.5us each pulse. 25 mV peak. Expect to see electron current pulses of this size or larger. Output is ~1V.

Time Domain (cont'd)



Takes about 20 revolution periods to get to peak value.